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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/687,663	10/20/2003	Srikanth Natarajan	200309987	1858

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EXAMINER

RAO, SHEELA S

ART UNIT	PAPER NUMBER
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2125

DATE MAILED: 08/04/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/687,663

Applicant(s)

NATARAJAN ET AL.

Examiner

Sheela Rao

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 May 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-36 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-36 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

1. Applicant's amendment filed May 18, 2005 has been entered and considered.
2. Claims 1-36 are pending and presented for examination. Claims 1, 6, 10, 15, 19, 24, 28, and 33 have been amended.

Response to Amendment

3. The objection made to the abstract of the disclosure is ***withdrawn*** in light of the submission of the new abstract.
4. The rejection of claims 1-36 as being anticipated by Stracke, Jr. in US Patent No. 6,047,330 is ***maintained*** and is re-stated below.
5. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
6. Claims 1-36 is rejected under 35 U.S.C. 102(b) as being anticipated by Stracke, Jr. in US Patent No. 6,047,330.

The patented reference discloses a virtual router system for computer applications. The system according to the patented invention provides a router discovery system capable of automatically configuring a virtual network topology. The patented reference teaches the limitations of the instant invention, as per instant claims 1, 6, 10, 15, 19, 24, 28, and 33, in that the obtaining information of a virtual router and using this information to determine the health of the virtual router is taught in column 1 at line 65, et seq. and in more detail in column 3, beginning at line 10. Wherein, it is taught that the transmission of a "heartbeat" is initiated and the data storage portion of the system records the number of hops or length of time that it takes for the heartbeat to reach its destination. In the event that the number of hops is high, the destination router is discarded and/or changed. This is analogous to the "health" of

the router in the instant application. Further, this information that is obtained is then used to produce a topology that identifies the health of the virtual router, see Figure 5.

With regard to the limitations of instant claims 2, 7, 11, 16, 20, 25, 29, and 34, the aspects of monitoring messages in the network, using the information from the messages in determining the health of the virtual router, and updating the topology based on any changes that are deemed necessary is taught by the prior art of record in column 2 at lines 12 through 30; wherein the transmission process of the heartbeats is explained.

As per instant claims 3, 12, 21, and 30, the limitation claimed is essentially the basis of the instant invention and is taught by the Stracke, Jr. reference as mentioned heretofore. Also, see col. 2: ll. 22-30 and col. 4: ll. 36-45.

As with claims 4, 8, 13, 17, 22, 26, 31, and 35, where first information is defined to be that of group priority information and group standby information is claimed, this is also taught by the reference of prior art as aforementioned since information to identify the status of the routers is taught in column 3 beginning at line 8.

With regard to claims 5, 9, 14, 18, 23, 27, 32, and 36, the instant claims are claiming that the routers operate according to a virtual swappable router protocol. In the disclosure by Stracke, Jr., the routers operating in accordance with swappable router protocols is taught. The reference teaches that when a router goes down, the other routers open up connections until appropriate routers are established so as to restore connectivity of the virtual network. See col. 3: ll.34, et seq.

As to the use of a management computer and a computer readable medium in the form of a program as per claims 10-36, the reference of prior art teaches the use of The Manage Router Topology which manages the virtual network connections and automatically updates the database. In order for the computerized controller to be employed, a program or algorithm is necessary for it to function as needed for the system and/or method in use. See column 4, line 46, et seq. and Figure 5.

For the reasons stated above, the limitations of the claimed invention is taught by the prior arts of record; thereby, rendering the instant claims unpatentable.

Response to Arguments

7. Applicant's arguments filed 18 May 2005 have been fully considered but they are not persuasive.

8. The amendments made to the instant claims and remarks presented have been reviewed and considered. However, Applicant's remarks are not persuasive and the amendments made to the instant claims do not place them in condition for allowance. Applicant's argument is that the patented invention of prior art does not "relate to identifying active and standby states of virtual routers in a network as claimed". Examiner disagrees. A description of active and standby routers are set forth in Applicant's disclosure at paragraph [0002]. Wherein it is stated that the active router forwards all packets to the virtual router and the standby router is used for routing functions when the active router fails. To this extent, Stracke teaches a router picking up packets to transfer along the network. In the case where a router fails or does not respond within a set time period, a connection with a new router is established. See column 2: lines 3-17; column 3: lines 24-32; and column 4: lines 35-45. Therefore, the disclosure of the invention by Stracke does teach the identifying of active and standby states of virtual routers in a network.

The rejection of claims 1-36 as being anticipated by the invention of Stracke, Jr. is maintained. Claims 1-36 are unpatentable for the all of the aforementioned reasons.

Conclusion

9. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

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the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

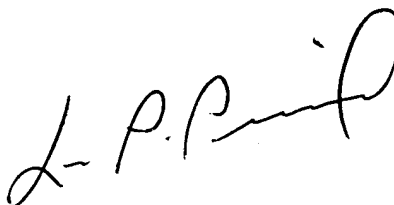
10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sheela Rao whose telephone number is (571) 272-3751. The examiner can normally be reached Monday - Friday from 8:30 am to 4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Leo Picard, can be reached on (571) 272-3749. The fax number for the organization where this application or any proceeding papers is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. It should be noted that status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should any questions arise regarding access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Sheela S. Rao
August 1, 2005



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